

REMARKS

Claims 1, 5 and 9 were previously presented and are currently amended in response to the Office action. Additionally, claim 5 is amended to correct typographical errors. Claims 4 and 11 are canceled. Therefore, claims 1-3 and 5-10 are pending in this application.

Claim Rejections Under 35 USC §101

Claims 1-3 and 5-10 were rejected under 35 U.S.C. 101. The Office action stated that the claimed invention is directed to a non-statutory subject matter due to limitations that suggest a passive recitation and do not necessarily provide a tangible result. In response, claims 1, 5 and 9 have been amended to remove the limitations “determining if rules permit the first user to execute the file system operation with respect to the file object; if the rules permit, sending...”, “if the rules permit, performing...”, and “if rules allow, activating...”, respectively.

Accordingly, the Applicants believe that amended claims 1, 5 and 9 and their respective dependent claims 2-3, 6-8 and 10 are in a condition for allowance under 35 USC §101.

Claim Rejections Under 35 USC §112

Claims 1, 5, and 9 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Office action stated that the claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art tht the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 5 and 9 are amended to remove the limitations “determining if rules permit the first user to execute the file system operation with respect to the file object; if the rules permit, sending...”, “if the rules permit, performing...”, and “if rules allow, activating...”, respectively. Accordingly, the Applicants believe that amended claims 1, 5 and 9 are in a condition for allowance under 35 U.S.C. 112, first paragraph.

Claim Rejections Under 35 USC §102

Claims 1-3 and 5 were rejected under 35 U.S.C. 102(e) as being anticipated by *Aboulhosn et al.* US Patent No. 6,938,042 (“Aboulhosn”). In response, claims 1, 5 and 9 are amended to claim a direct communication between the first and second users, a direct propagation of metadata between the first and second computing devices, and directly transmitting metadata to the at least one other online member, respectively. The direct communication/propagation/transmission between two users in the network is the key difference and advantage over Aboulhosn, as explained by the following remarks.

In Aboulhosn, when a file is updated, the related updated metadata changes necessarily flow through a file owner or a group owner to be distributed to other members. If a file owner changes the file, the file owner sends the updated metadata to the other group members (Aboulhosn, col. 2, lines 36-41). If a non-file-owning member accesses the file, a dialog takes place between the file owner and the member, resulting again in the file owner sending out the updated metadata to other group members (Aboulhosn, col. 2, lines 15-23). In another embodiment, the file owner sends a message to the group owner regarding file changes, and the group owner sends out the updated metadata (Aboulhosn, col. 2, lines 44-48). Alternatively, a member updates a file, dialogs with a group owner, and the group owner sends out updates to

group members (Aboulhosn, Figure 6B). In all of Aboulhosn's scenarios, the file owner or the group owner serves as the distribution gatekeeper of updated metadata information.

Amended claims 1, 5 and 9 of the pending application, however, do not require using a file owner or a group owner to communicate information regarding file changes. The changer of the file (i.e., first user) may directly communicate this information to the second user without being required to go through a distribution gatekeeper. Figure 19, step 1906 and paragraph [0076] describe the metadata being published to other group members when a shared file is updated; no dialog with a gatekeeper is necessary. The gatekeeper is not needed in the pending application because the group policy regarding file sharing domains and permissions is known by every group member (paragraph [0086]), and thus each group member has the information to directly communicate changes. Updates do not need to flow through a gatekeeper for verifying group membership and permissions as in Aboulhosn. The pending application thus has an advantage over Aboulhosn as file changes are communicated more directly and quickly when they occur.

A second illustration of the pending application's advantage over Aboulhosn can be seen in the updating of a file by a non-file-owning member. Aboulhosn, col. 2 lines 15-23 describes a virtual (copy) file being accessed by a non-owning member. The system detects this change, requests that the file owner send a copy for the non-owning member to edit, and then finally the file owner sends out updated metadata to the other group members. Aboulhosn thus has the file owner serving as the gatekeeper of the "master" copy of the file and the distribution of changes. Other members have only virtual copies and must interact with the gatekeeper when they want to change a file.

The pending application, however, allows any member to modify a file and distribute the changes to group members without a gatekeeper as an intermediary. Paragraph [0077] of the specification describes an embodiment of the transmitted metadata from a first user: “As shown, the name and path to the file are included in the metadata of a transmitted shared file. In addition, an identifier for the container of the shared file is provided as well as the location of the machine on which the file resides....” This aspect of the pending application allows a first user to communicate directly and efficiently with a second user regarding file changes. The identification of the file owner is provided by the first user directly to the second user in the metadata, so if the second user has any need to access the file owner, it will have that information available. However, the file owner does not serve as the gatekeeper for the distribution and transmission of changes as in Aboulhosn. In the pending application, any user may modify a shared file and inform others in its group (including the file owner) about the metadata changes. In addition to changed metadata, the actual shared content changes of a shared file do not even need to be processed by a gatekeeper in the pending application. The changes may be download from any machine in the group that has them, as described in paragraph [0076].

The novelty of the direct communication of metadata and shared file changes between two users in a shared group, without the need to use an intermediate file and/or group owner as a gatekeeper, is not disclosed by Aboulhosn. The direct communication of the pending application provides an advantage over Aboulhosn by providing quicker and more efficiently shared file updates amongst group members. Accordingly, the Applicants believe that Aboulhosn does not anticipate amended claims 1, 5 and 9 and their respective dependent claims 2-3, 6-8 and 10, and thus the claims are allowable under 35 U.S.C. 102(e).

Claim Rejections Under 35 USC §103

Claims 6-8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Aboulhosn as applied to claim 5 above, and further in view of *Taylor et al.* US Patent 5,754,306 (“Taylor”).

Claims 6-8 depend on amended claim 5. Neither Aboulhosn nor Taylor discloses a method for updating a shared file in a computer network including a group of communicating computing devices in a peer-to-peer network using direct propagation of metadata between two peers, as disclosed by amended claim 5. Accordingly, claims 6-8 are allowable over the combination of Aboulhosn in view of Taylor under 35 U.S.C. 103(a).

Claims 9-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Balfanz et al.* US Publication No. 2004/0103280 (“Belfanz”). Accordingly, claims 1 and 9 are amended to limit their scope to a serverless computer network, as described in paragraph [0031] of the specification.

MPEP 706.02(j) states “...To establish a prima facie case of obviousness, three basic criteria must be met. ... [The third criteria requires that] the prior art reference (or references when combined) must teach or suggest all claim limitations.” Balfanz does not limit his invention to a serverless network, in fact, he directly teaches the presence of servers. Balfanz [0022] states “...the respective memory of each laptop ...stores file *server* software application instructions.” Additionally, Balfanz [0023] states “The *server* software is configured on each machine...” The network of the pending application, however, is *serverless*, which is neither taught nor suggested by Balfanz.

Accordingly, since Belfanz directly teaches away from a serverless network, the Applicants believe that amended claims 1 and 9 and their dependent claims 2-3 and 10 are patentable over Belfanz under 35 U.S.C. 103(a).

CONCLUSION

In view of the above amendment and arguments, the applicant submits the pending application is in condition for allowance and an early action so indicating is respectfully requested.

The Commissioner is authorized to charge any fee deficiency required by this paper, or credit any overpayment, to Deposit Account No. 13-2855, under Order No. 30835/306546, from which the undersigned is authorized to draw.

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